

## Buchbesprechungen

PRIEDE, I. G.; SWIFT, S. M. (eds.) **Wildlife Telemetry**: remote monitoring and tracking of animals. Ellis Horwood Series in Environmental Management, Science and Technology. Chichester: Ellis Horwood Ltd 1992. 708 pp. ISBN 0-13-957994-X

For more than a decade telemetry and radiotracking have been integral components of the standard methods employed in behaviour-biological and physiological field research. At the beginning of the 1980s, publications dealt primarily with the technique of transmitters and receiving sets. Over the past few years the number of publications concerned with observational results has increased exponentially: The present volume deals with both, technique and research results. It contains contributions from the Fourth European Meeting on Wildlife Telemetry, University of Aberdeen. History and possibilities of telemetry are well presented in an overview article. 19 chapters deal with technical problems, 9 with radiotracking in general and with satellite assistance in particular, 5 with evaluation methods, 18 with telemetry used on fish and crustaceae, 9 with telemetric work on small terrestrial animals, 9 with telemetric studies on birds, and 7 chapters bring results obtained on larger animals. Examples taken from mammalian research are presented in 16 reports (field mice, rodents, predators, seals, wild boar, wallaby). This enumeration shows the richness of this volume; it is surely the most comprehensive survey published to date. The individual articles contain a variety of different information, some of which are very short. Altogether, the more than 70 articles provide an abundance references from the literature. As software plays an important role when evaluating telemetric data, an appendix refers to 7 software packages and their possible usage.

This book can be highly recommended to those using telemetry in order to check critically their own work; there are numerous suggestions and possibilities for further planning in this field.

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KLÖS, H.-G.; FRÄDRICH, H.; KLÖS, U.: **Die Arche Noah an der Spree**. 150 Jahre Zoologischer Garten Berlin. Eine tiergärtnerische Kulturgeschichte von 1844–1994. Berlin: FAB-Verlag 1994. 504 S.; über 600 Abb. DM 48,-. ISBN 3-9227551-29-5

Zoologische Gärten finden heute in mannigfacher Sicht das Interesse breiter Öffentlichkeit. Begegnungen mit einer Vielfalt von Tieren auf engerem Raum in fast greifbarer Nähe führen zu persönlichen Erlebnissen, die weder bildliche Darstellungen noch moderne Filme zu ersetzen vermögen. Dies belegt die sehr hohe Besucherzahl moderner Zoologischer Gärten. Doch es werden auch Stimmen laut, welche sich zu Tierhaltungen in Zoologischen Gärten sehr kritisch äußern. Sehr oft beruhen solche Stellungnahmen auf unzureichender Kenntnis moderner Betreuungsweisen. In modernen Zoologischen Gärten ist die Tierhaltung meist artgerechter als jene vieler Heim- oder Haustiere. Gewiß lassen sich in biologischer Sicht gegen Tierhaltungen in früheren Menagerien viele Einwände erheben, obgleich auch diese die Menschen in damaliger Zeit faszinierten. Seither hat sich in der Haltung von Zootieren eine bemerkenswerte Änderung vollzogen; Zoologische Gärten sind zu Stätten geworden, welche dem Fortbestand bedrohter Tierarten dienen.

Die Entwicklung eines Zoologischen Gartens macht das lebendig geschriebene Buch des Ehepaars KLÖS und HANS FRÄDRICH deutlich. Sie berichten über Aufbau und Ausbau des vor 150 Jahren gegründeten Zoologischen Garten Berlins, der weltweite Anerkennung genießt. Dies verdankt er tatkräftigen, kenntnisreichen Direktoren, denen es gelang auch schwierige Zeiten und die weitgehenden Zerstörungen nach dem 2. Weltkrieg zu meistern. Es gelang nicht nur ein Wiederaufbau, der den Tieren artgemäßere Bauten schuf, auch in der Ernährung und Betreuung vollzogen sich artgerechte Fortschritte. Darüber geben Berichte verschiedener Reviertierpfleger interessante Sachverhalte zumal über gehaltene Tiere und deren biologische Besonderheiten Hinweise gegeben werden.

Das Werk ist gewinnbringend für kulturgeschichtlich Interessierte, für Zoofreunde und für Zoologen. Meine eigene Verbundenheit mit Zoologischen Gärten begann als Schüler in Halle. Als Student erlebte ich 1927 eine eindrucksvolle Führung durch Geheimrat Dr. LUDWIG HECK und Dr. OSKAR HEINROTH im Berliner Zoo. Seither verfolge ich die Geschehnisse des Berliner Zoologischen Gartens mit Anteilnahme. Die jetzt vorgelegte Zusammenschau habe ich als Erinnerungserlebnis genossen.

W. HERRE, Kiel

## Buchbesprechung

BORN, E. W.; DIETZ, R.; REEVES, R. R. (eds.): **Studies of White Whales (*Delphinapterus leucas*) and Narwhals (*Monodon monoceros*) in Greenland and adjacent waters.** Meddelelser om Grønland, Bioscience 39, 1994; Commission for Scientific Research in Greenland. 259 pages, many illustrations and tables, four colour plates. 380,- Danish Kroners, 55,- US Dollars. ISBN 87-601-4129-8, ISSN 0106-1054. Distributed by Danish Polar Center, Strandgade 100 H, DK-1401 Copenhagen K, Denmark.

In this Danish series of publications contributing to the fauna and flora of Greenland, a special issue deals with two Arctic whale species, the white whale or beluga (*Delphinapterus leucas*) and the narwhal (*Monodon monoceros*). Both cetacean species are not only found in Greenland waters, but are circum-Arctic marine mammals. Most of the twenty studies in this book are multi-authored and researchers from Denmark, Greenland and Canada represent the main contributors. However, authors from Norway, the United Kingdom, Germany and Hong Kong have also contributed to this book. Nine contributions deal exclusively with the white whale, seven exclusively with the narwhal and four articles present data on both species.

After an introductory overview written by the three editors, six studies deal with the "Distribution and abundance", especially of the narwhal and, in less detail, of the beluga. Four articles present balanced information on "Exploitation and status" of both Arctic whale species and the following section consists of one contribution on "Habitat and behaviour" of the narwhal and another on the white whale. The book concludes with seven studies dealing with different subjects which are compiled under the heading "Life history, stock identity and toxicology".

The narwhal is an ice-associated cetacean and the studies dealing with its distribution and abundance are mainly based on aerial surveys or on observations from high vantage points on cliffs. On the other hand, studies dealing with the beluga or white whale are based mainly on opportunistic observations by hunters and local residents, or from mariners. In East Greenland, at least, the difficulty to observe white whales might not only be related to the rarity of this species in this area, but also to the general lack of suitable shallow-water habitats (DIETZ et al., pages 69–86). On the other hand, narwhals "were concentrated in waters 350 m or more in depth ..." in waters of the Canadian High Arctic (RICHARD et al., pages 41–50).

SAVELLE (pages 101–117) contributes a study on the prehistoric exploitation of white whales and narwhals in the eastern Canadian Arctic. The Palaeo-Eskimo population living in this area before 1000 A.D., probably lacked a sophisticated whale-hunting technology. The two cetacean species are extremely rare in these archaeological sites. In Inuit sites subsequent to 1000 A.D. white whale and narwhal remains are more common, but make up relatively insignificant portions of the total faunal assemblages. The author speculates that the two whale species might not have contributed to the diet of the Inuit during prehistoric and early historic times.

The last study published in this book (STERN et al., pages 245–259) immerses the reader into the problems of the 20th century: Blubber, skin and kidney samples of the white whale from northwest Greenland were analysed for polychlorinated biphenyl compounds (PCB's) and other organochlorines. The highest contaminant levels were observed in animals of about three months of age, very probably because lower chlorinated PCB's and more water-soluble organochlorines are preferentially transferred during lactation.

The original material published in this volume, of which just a very small selection was mentioned above, contributes to the understanding of and gives valuable information on two fascinating species of marine mammals that live in a forbidding environment. The present reviewer missed two additional sections in this book: An index that would make the wealth of information more readily accessible, as well as a list of the authors and their addresses.

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